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EXAMINER

BEHNCKE, CHRISTINE M

ART UNIT PAPER NUMBER

3661

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,460

Applicant(s)

JENG, JACK ING

Examiner

Christine M. Behncke

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22, 24-26 and 28 is/are rejected.
- 7) ☒ Claim(s) 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the Amendment and Remarks filed 31 August 2005, in which claims 1-22, 24-26 and 28 were presented for examination. Claim 23 was withdrawn from consideration.

2. The Examiner acknowledges the amended drawings of Figures 11, 12 and 21 filed 31 August 2005 and withdraws the previous objection to the drawings.

3. The Examiner acknowledges the amended specification filed 31 August 2005 and withdraws the previous objection to the Figure 21.

Claim Objections

4. **Claim 28** is objected to because of the following informalities: the limitations "the MSC motion sensor/gauge" (line 8) and "the digital camera" (line 7) lack antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25 and 28 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

Art Unit: 3661

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. **The claim(s) must be in one sentence form only.** Note the format of the claims in the patent(s) cited.

Response to Arguments

6. Applicant's arguments filed 31 August 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that Hutzet et al., US Patent Application Publication 2003/0117728, is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the instant application claims an electronic circuit system embedded into a rearview/side mirror of a vehicle. The examiner does not disagree that the Hutzet et al. application claims are directed more towards an interior rearview mirror assembly for a vehicle that can be used to house/receive other components. However, the full disclosure of Hutzet et al. discloses wherein the rearview mirror assembly comprises electronic circuitry elements, including a GPS receiver, CCD/CMOS image capturing device, CPU control circuitry, a battery, memory storage, USB connection enabled, and other electrical or electronic

Art Unit: 3661

elements (Please see the cited portions in the following rejection). Hutzet et al. further discloses wherein the interior rearview mirror assembly comprises a security system that can be triggered by a break-in or accident ([0115]). In light of the above, the Examiner respectfully disagrees that Hutzet et al. is nonanalogous art.

Applicant contends that none of the cited prior art teaches or even suggests the use of USB or Ethernet. The Examiner respectfully disagrees. Hutzet et al. discloses the use of connecting plural electronic elements, for example the cameras and microphones, by wire connection, such as CAN or LIN bus connection or a multi-wire cable or a fiber-optic link ([0105]). An Ethernet cable is a plurality of twisted wires or fiber optics sheathed in a coaxial or similar cable. Further Hutzet et al. discloses the use of an Internet connector ([0094] and [0110]), wherein Ethernet is well known to one of ordinary skill in the computer art as an Internet connection. Hutzet et al. discloses the use of a USB port for example, regarding connecting a plurality of computer accessories to the device ([0218]). The port is further illustrated in Figure 44, elements 1960 and 1962. In order for the device to operate with the USB cable, it would be obvious to one of ordinary skill in the computer art for the device to be USB enabled, thus containing USB host port, the software to run/recognize the USB connection.

Applicant contends that none of the prior art teaches or suggests the trigger of acceleration/vibration motion sensing and recordation. The Examiner respectfully disagrees. Hutzet et al. discloses that the interior rearview mirror assembly may comprise a component of a security system. The security system teaches the use of several cameras, which may be located in the interior rearview mirror, to record and

Art Unit: 3661

document the vehicle status and images of the interior or exterior of the vehicle ([0115]). These cameras are triggered by, for example, a break-in, speed, brake activation, vehicle control status signals, yaw and roll, and etc ([0115]). Hutzet et al. teaches the recording and documentation can help investigators establish causes and conditions of the accident ([0115], lines 70-76). Hutzet et al. further discloses wherein the camera recording system preferably records data onto a recording medium that is rugged and protected from an accident and preferably non-volatile ([0115], lines 76-84). The Examiner contends that the sensing and recordation argued by the Applicant, is met by the disclosure of Hutzet et al., the triggers being speed, brake activation, yaw and roll. However, as stated in the previous rejection, Hutzet et al. did not specifically disclose a vibration and motion sensor/gauge. However, as applied previously, Chan teaches the use of a vibration and motion sensor/gauge to trigger the automatic storage in the memory device. Similarly to Hutzet et al., Chan teaches this method of triggering the image documentation can be retrieved to assist in the after collision analysis (Column 8, lines 50-58).

Applicant contends that none of the cited prior art teaches or even suggests the use of JPEG/MPEG video compression and storage. The Examiner respectfully disagrees. Hutzet et al. discloses the use of CCD/CMOS sensors and the storage of the captured images on a preferable non-volatile memory that is non-erasing in the event of electrical power loss in the vehicle ([0115], lines 76-84). As applied previously, in the admitted background of the instant application the Applicant teaches that it is well known in the electronic and specifically imaging art, to use a JPEG/MPEG compression

Art Unit: 3661

module in digital cameras that use CCD/CMOS sensors (Figure 3 labeled Prior Art). It is well known in digital cameras, as suggested by the Applicant, that the compression is necessary so that multiple lenses can be compressed and to further increase computer storage and management of the images (page 7 of 41). Please see the rejection below.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-4, 15-18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutzel et al., US Patent Application Publication No. 2003/0117728, in view of Chan, US Patent No. 5,899,956, and in further view of the admitted Background Of The Invention of the current application.

8. **(Claims 1, 4, 15-18 and 26)** Hutzel et al. discloses an electronic circuit system embedded into a rearview/side mirror of a vehicle (Abstract and [0089]) comprising: a GPS receiver circuit module with an antenna ([0088] lines 1-4); a plurality of optical lenses and CCD/CMOS sensors ([0106]); a CPU based central control module circuit ([0120] lines 92-95); a memory storage ([0115]); a battery ([0111]); real-time clock with battery (inherent in a GPS system); both USB Host and USB Device outlets ([0218]); and internet communication outlet ([0094]). Hutzel et al. discloses the recording and documentation of the interior or exterior of the vehicle, which can help investigators

Art Unit: 3661

establish causes and conditions of accidents ([0115], lines 70-76). The triggers disclosed by Hutzet et al. include speed, brake activation, yaw and roll and etc. ([0115], lines 44-82), but Hutzet et al. does not disclose specifically a vibration and motion sensor/gauge. However, Chan teaches the use of a vibration/motion sensor/gauge (impact/shock sensor, element 105) to trigger the automatic storage in the memory device in case of an accident or like occurrence. It would have been obvious to one of ordinary skill in the electronic art combine the invention of Hutzet et al. with the teachings of Chan because the vibration/motion sensor with the microprocessor connected to it, the vibration/sensor may be used as a trigger for the automatic storage of detected visual information that comes within the vicinity of the vehicle in a memory device (Column 7, lines 27-34), stored images can be retrieved for aftermath analysis in cases of a car crash or accident (Column 8, lines 50-58) as taught by Chan.

Hutzet et al. discloses wherein the mirror assembly houses a plurality of electronic devices such as antennas, including GPS antennas and cellular antennas ([0088]). Hutzet et al. does not explicitly disclose wherein the GPS antenna is a planar antenna. However, the use of a planar antenna is well known to one of ordinary skill in the navigational and electronic art at the time of the invention to adapt the invention of Hutzet et al. to include a planar antenna. As stated in Applicant's own Background of the Invention (page 8 of 41, lines 13-19), it would have been obvious to one of ordinary skill in the electronic art to include a planar antenna in the device of Hutzet et al. because planar antennas are already popular in Global Mobile, Personal, Wireless and mobile communication units, easily mass-produced, are useful because of their flat

Art Unit: 3661

appearance, and as the Applicant has further admitted, the planar ceramic antenna is very common for GPS applications (page 9 of 41, lines 6-7).

Hutzel et al. does not explicitly disclose that the CPU is a RISC CPU with a plurality of UART serial control ports, a plurality of USB control/host ports, an Ethernet port, a DRAM and Flash memory controllers. However, RISC architecture based CPU is one of the most commonly known and used architecture in modern computers and it would have been obvious to one of ordinary skill in the electronic and computer art at the time of the invention to utilize this well-known CPU because the RISC chips well-known tendency towards small size, inexpensive production, less power consumption and higher speed compared to other CISC chips. Within most CPUs available, it is well known to have a plurality of UART serial control ports located on control chips to manage the reception/output of streams of data, this is supported by Applicant's admission in the Background, of a typical GPS receiver, Figure 1, element 108. Hutzel et al. discloses the use of a memory in the mirror assembly, but not specifically DRAM ([0115]). However, the use of DRAM with a CPU is well known in the electronic and computer art at the time of the invention, as the broad label of DRAM encompasses the most commonly used form of RAM; at the time of the invention DRAM would have been obvious to one of ordinary skill in the computer art to include in a CPU based device because it is widely available and affordable. Hutzel et al. discloses the use of a USB port for example, regarding connecting a plurality of computer accessories to the device ([0218]). The port is further illustrated in Figure 44, elements 1960 and 1962. In order for the device to operate with the USB cable, it would be obvious to one of ordinary skill

Art Unit: 3661

in the computer art for the device to be USB enabled, thus containing USB host port, the software to run/recognize the USB connection. As admitted in Applicant's Background of the Invention, USB control/host ports are well known in the art for conveniently connecting a plurality of devices with a controller due to its low cost and wide spread use (page 7 of 41, lines 6-11). Hutzet et al. discloses the use of a battery, it would have been obvious to one of ordinary skill in the art to specify that the battery be a lithium-ion battery as they are widely used, reliable, rechargeable, and increasingly inexpensive, as admitted by the Applicant (page 10 of 41, lines 8-10). Hutzet et al. discloses the use of connecting plural electronic elements, for example the cameras and microphones, by wire connection, such as CAN or LIN bus connection or a multi-wire cable or a fiber-optic link ([0105]). An Ethernet cable is a plurality of twisted wires or fiber-optics sheathed in a coaxial or similar cable. Further Hutzet et al. discloses the use of an Internet connector ([0094] and [0110]), wherein Ethernet is well known to one of ordinary skill in the computer art as an Internet connection. As admitted in Applicant's Background of the Invention, Ethernet networks are well known in the communications field and are by many considered to be the most popular system today and therefore would have been obvious to one of ordinary skill in the electronic and communication art to include/adapt for wide-access communication.

Hutzet et al. discloses wherein the mirror assembly maybe equipped with a remote keyless entry receiver, and further for memory storage the preferential use of a non-volatile memory for storage of recorded and documented images/data stored from a triggering event ([0115]). Hutzet et al. does not disclose a Smart Card Access host

Art Unit: 3661

electronics module. However, as admitted in Applicant's Background of the Invention, it would have been obvious to one of ordinary skill in the electronic art at the time of the invention for the invention of Hutzet et al. to include a Smart card access host because as the Applicant admits, Smart Cards are simply one type of flash non-volatile memory media and further have the benefits of being secure and are becoming widely used and therefore affordable (page 8 of 41, lines 4-11).

Hutzet et al. discloses the use of CCD/CMOS sensors and the storage of the captured images on a preferable non-volatile memory that is non-erasing in the event of electrical power loss in the vehicle ([0115], lines 76-84). As applied previously, in the admitted background of the instant application the Applicant teaches that it is well known in the electronic and specifically imaging art, to use a JPEG/MPEG compression module in digital cameras that use CCD/CMOS sensors (Figure 3 labeled Prior Art). It is well known in digital cameras, as suggested by the Applicant, that the compression is necessary so that multiple lenses can be compressed and to further increase computer storage, memory space and transmission time, and management of the images (page 7 of 41).

9. **(Claim 2)** Hutzet et al. discloses wherein the device is a stand-alone unit and is mounted at a proper position to a windshield glass of a vehicle (figure 46).

10. **(Claim 3)** Hutzet et al. discloses wherein the device is at a proper position of the windshield glass and is mounted at the highest position for better wireless communication and with the GPS antenna facing the sky and better visual recording positions of a vehicle ([0086] and [0096]).

Claim Rejections - 35 USC § 103

11. Claims 5-9, 10, 13 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutzet et al. in view of Chan as applied to claim 1 above, and further in view of Turnbull et al., US Patent No. 6,750,823.

12. **(Claims 5 and 6)** Hutzet et al. discloses wherein the mirror assembly may include plural electronic devices such as cellular phone antennas ([0088], lines 1-3) and further wherein a telecommunication device (such as a cell phone) may be connected to the mirror assembly device so the vehicle control system may recognize the phone, direct incoming calls to speakers, and be hands-free activated ([0110]). Hutzet does not disclose the specific cellular frequency transmissions. However, Turnbull teaches the use of a cellular antenna embedded into a vehicle rearview or side mirror (figures 8A-8C). It would have been obvious to one of ordinary skill in the electronic art at the time of the invention that CDMA (Code-Division Multiple Access) is a digital cellular technology and could be used with a general cellular antenna.

13. **(Claims 7 and 8)** Hutzet et al. discloses the use of an antenna ([0088]) but does not specify wherein the antenna is planar. But as discussed previously, it would have been obvious to one of ordinary skill in the electronic and navigational art to use a planar antenna with the device because planar antennas are easily mass-produced, are useful because of their flat appearance and are already widely used in Personal, Wireless and mobile communication units, as admitted by the Background (page 8 of 41, lines 13-19). Further, it would have been obvious to one of ordinary skill in the

Art Unit: 3661

electronic and navigational art at the time of the invention to use one of a print circuit trace antenna, ceramic chip antenna, or PIFA antenna because each are a well known type of planar antenna, as admitted in the Background of the instant application (page 9 of 41, lines 6-7).

14. **(Claims 9 and 10)** Hutzet et al. discloses the use of an antenna connected to the GPS receiver ([0115]). Hutzet et al. does not explicitly disclose wherein the antenna is a planar antenna. However, Turnbull et al. teaches using a microwave antenna, preferably a planar patch antenna to receive GPS signals (Column 6, lines 56-65) wherein the antenna is located in a mounting structure glued to the windshield glass of the vehicle (Column 5, lines 1-37). Further, Turnbull et al. teaches wherein the antenna may be located separately from the receiver circuit therefore a coaxial cable connection would be required (Column 7, lines 44-53). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Hutzet et al. in view of Chan with the teachings of Turnbull et al. because the antenna mounting taught by Turnbull et al. allows for a secure mounting on the top of the windshield, better reception of satellite signals and retain a pleasing aesthetic (Column 5, lines 13-57). Further, it is well known in the art that a pig-tail coaxial cable is one type of coaxial cable and it would have been obvious to one of ordinary skill to use a pig-tail cable in the connection as they are inexpensive and widely used.

15. **(Claim 13)** Hutzet et al., in view of Chan and in further view of Turnbull et al., further discloses wherein the wireless communication module serves as an emergency help beacon, receiving internet data communication signals and wireless broadband

Art Unit: 3661

communication terminal to a PC, notebook PC, or PDA ([0114], [0123], [0110] and [0094]).

16. **(Claim 19)** Hutzal et al., in view of Chan and in further view of Turnbull et al., further discloses wherein the USB/Ethernet outlets and the connections, between the device and a mass storage Hard Disk (memory [0115]), records long periods of driving via the USB or an Ethernet interface ([0115], images are taken by the CCD/CMOS sensors and recorded onto a memory medium, the system maintains the stored images and/or vehicle data in the vehicle for downloading when desired, further Hutzal discloses wherein the system can connect the mirror assembly to an accessory via a USB cable to provide a link between the accessory and the vehicle system [0218] thus capable of downloading the images/vehicle data to an external accessory).

17. **(Claim 20)** Hutzal et al., in view of Chan and in further view of Turnbull et al., discloses wherein the rearview/side optical lenses that are embedded into the rearview/side mirror in a manner to allow operation during the night or dark moment ([0115], lines 12-14 and 29-31).

18. **(Claim 21)** Hutzal et al., in view of Chan and in further view of the Applicant's disclosed Background of the Invention, discloses the use of plural cameras in the system, wherein the images are recorded in the same memory ([0115]). As admitted by the Applicant in the Background, it is common in digital cameras with a plurality of lenses to use a multiplexer and a JPEG/MPEG IC as illustrated in the prior art figure 3. It would have been obvious to one of ordinary skill in the electronic art to utilize a multiplexer circuit that selects among a plurality of CCD/CMOS lenses for digital camera

Art Unit: 3661

compression module to reduce the size of the images and save memory storage space (page 7 of 41, line 13-page 8 of 41, line 2).

19. **(Claim 22)** Hutzet et al., in view of Chan and in further view of the Applicant's disclosed Background of the Invention, discloses wherein cameras are located in the interior of the camera assembly behind the reflective material wherein the optical lenses are equalized to compensate the driver's head and rearview where portions of the reflecting material is processed in a way such that the light reflects less for visual recording ([0106]-[0107]). Further as admitted in the Background of the instant application, the use of plural optical lenses is well known (figure 3 and page 7 of 41, line 13-page 8 of 41, line 2).

Claim Rejections - 35 USC § 103

20. Claims 11, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutzet et al. in view of Chan as applied to claims 1 and 2 above, and further in view of McCarthy et al., 6,678,614.

(Claims 11, 12 and 14) Hutzet et al. in view of Chan disclose the device described previously in claims 1 and 2, but do not disclose the use of a Smart Card reader. Hutzet et al. discloses the use of a nonvolatile memory for storage of the images captured by the plurality of cameras ([0115]), and further the use of a keyless entry accessory ([0097]). However, McCarthy et al. teaches the use of a contact or a contactless Smart Card reader device embedded into a rearview/side mirror that may be used for security key or transfer of information (Column 3, line 66-Column 4, line 5). It would have been obvious to one of ordinary skill in the art at the time of the invention

Art Unit: 3661

to combine the invention of Hutzet et al. in view of Chan with the teachings of McCarthy et al. because, as the Applicant admits in the Background, Smart Cards are simply one type of flash non-volatile memory media and further have the benefits of being secure and are becoming widely used and therefore affordable (page 8 of 41, lines 4-11).

Further, McCarthy suggests it would have been obvious to one of ordinary skill in the electronic art because the smart cards allow for the easy information exchange between accessories (Column 3, line 66–Column 4, line 5).

Claim Rejections - 35 USC § 103

21. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutzet et al. in view of Chan and the Background of the Invention, as applied to claim 1 above, and further in view of Scharon, US Patent No. 5,262,813.

22. **(Claim 24)** Hutzet et al. in view of Chan and the Background of the Invention discloses the device as described in Claim 1, wherein the device contains an impact/shock sensor taught by Chan. Chan does not teach wherein the impact/shock sensor comprises a double spring attached metal ball. However, Scharon teaches in the Background, that it is well known in the art that an typical impact sensor utilizes a movable mass, often in the shape of a spherical or metal ball, constrained to move through a closed chamber against restraining means, typically compressed springs, in order to detect sharp changes in acceleration, vibration, flip and in general a collision (Column 1, lines 18-30). It would have been obvious to one of ordinary skill in the electronic art at the time of the invention to combine the invention as disclosed by Hutzet et al. in view of Chan and the disclosed Background, with the teachings of

Art Unit: 3661

Scharton because the impact sensor taught by Scharton is inexpensive, simple and reliable.

23. **(Claim 25)** Hutzet et al. further discloses a microcontroller to identify significant instances to the central control module to coordinate the video/voice/motion recording and alarm/emergency activation ([0115] and [0120]), wherein the microcontroller also takes the vehicle's speedometer input to consolidate with the motion gauge/sensor to record more complete vehicle motion data in the Flash memory ([0115]).

Claim Rejections - 35 USC § 103

24. **Claim 28** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rayner, US Patent No. 6,405,112 in view of Schofield, US Patent No. 5,798,688, and in further view of Turnbull, US Patent No. 6,750,823.

Rayner discloses a method for providing a video/audio record within a vehicle comprising: a normal function including: detection of ignition and power on conditions (Column 3, lines 46-48); a burglar alarm/beacon activation with voice/video recording upon a trigger (Column 6, lines 11-22 and 36-38); normal video/voice/motion recording in DRAM (Column 5, lines 35-46); storing the voice/video/motion from DRAM to Flash in the instance of significant events identified by a motion sensor/gauge (G-force sensor 82, Column 6, lines 11-35); transferring the voice/video/motion data from DRAM to Flash upon emergency button/driving termination events (Column 6, lines 36-51).

Rayner further discloses the detection of USB Host and Device terminal plug-in events (Column 8, lines 23-28); setting up a link to a mass storage hard disk (a PC via a USB

Art Unit: 3661

cable, Column 8, lines 11-39); selecting USB communication protocol and communicating with the USB digital camera monitor device (figure 4, Column 4, line 67-Column 5, line 25), GPS device (GPS receiver 95); downloading external USB Flash memory (card 101) to retrieve the recorded video/voice/motion from the flash (Column 8, lines 29-38); and storing the video/voice/motion to a USB mass storage (Column 8, lines 23-38). Rayner further discloses detection of ignition and power on conditions (Column 3, lines 46-48), detecting significant events (Column 6, lines 11-40) and transferring last few seconds of video/voice/motion from DRAM to Flash (Column 6, lines 11-40).

Rayner does not disclose wherein the recording is activated specifically upon a failure of a smart card access. However, Schofield teaches an interior mirror assembly for a vehicle wherein the mirror assembly comprises a keyless entry system (figure 4) responsive to an electromagnetic signal transmitted from a remote device to the communication module included in the housing of an interior rearview mirror that locks/unlocks the doors to the vehicle (Column 3, lines 6-17). It would have been obvious to one of ordinary skill in the electronic and automotive art to combine the invention of Rayner with the teachings of Schofield because the keyless entry to the vehicle allows quick access to the vehicle and further similarly to other methods of unlocking a vehicle, the denial/failure of the keyless entry or other signatures of a break-in would trigger the recording system of Rayner to capture and record the events in and out of the vehicle (Rayner: Column 6, lines 36-52).

Art Unit: 3661

Rayner discloses the system being connected to a PC or other accessory (Column 8, lines 23-28) and the embedment of a GPS receiver in the interior mirror system (element 95, figure 4) but does not disclose wherein the other accessories are a mapping device, call device or wireless communication device. However, Turnbull et al. teaches a GPS receiver within an interior mirror assembly that is used by a navigation system and mapping device (laptop computer 21, Column 19, lines 45-65). Further Turnbull et al. teaches wherein the mirror assembly connects to a wireless call/communication device (a cellular phone, Column 20, lines 33-48). While Turnbull et al. discloses the connections between the mirror assembly and the mapping and communication devices are wireless, it would have been obvious to one of ordinary skill in the electronic art at the time of the invention to adapt the mirror assembly and laptop to a wire/cable connection.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action (New claim 28). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 3661


shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (571) 272-8103. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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